FORESTRY

THE JOURNAL OF THE INSTITUTE OF FORESTERS
OF GREAT BRITAIN

Edited by D. C. Malcolm

VOLUME 54

PUBLISHED BY THE
OXFORD UNIVERSITY PRESS
1981

PAST PRESIDENTS

1926 to 1928	R. L. Robinson	1956 and 1957	A. P. Long
1929 and 1930	John D. Sutherland	1958 and 1959	Sir Harry Champion
1931 and 1932	R. S. Pearson	1960 and 1961	E. C. Mobbs
1933	W. Dallimore	1962 to 1965	J. A. B. Macdonald
1934 and 1935	Sir Alexander Rodger	1966 and 1967	J. Maxwell Macdonald
1936	Sir Francis Acland	1968 and 1969	M. J. Penistan
1937 and 1938	W. L. Taylor	1970 and 1971	J. E. Garfitt
1939 to 1944	W. A. Robertson	1972 and 1973	J. D. Matthews
1945 to 1947	W. H. Guillebaud	1974 and 1975	G. E. Godwin
1948 and 1949	O. J. Sangar	1975 to 1977	Jack Evans
1950 and 1951	H. M. Steven	1977 to 1979	C. J. Taylor
1952 and 1953	A. H. Gosling	1979 and 1980	R. C. Steele
1954 and 1955	W. E. Hiley		

The Council. The affairs of the Institute are managed by a Council which shall consist of the President, Vice-President, Editor(s), all *ex officio*, together with twelve others, of whom four shall be Fellows, six Ordinary Members, and two Voting Associates. Office bearers and Councillors are elected by written nomination and postal vote.

LIST OF OFFICE BEARERS AND COUNCILLORS 1981–82

President: J. W. Dodds, Fountain Forestry Ltd., Durn, Isla Road, Perth.

Vice-President: Dr. W. E. S. Mutch, Department of Forestry and Natural Resources, King's Buildings, University of Edinburgh, Mayfield Road, Edinburgh.

Editor of Journal: Dr. D. C. Malcolm, Institute of Foresters, 22 Walker Street Edinburgh EH3 7HR.

Business Editor of Journal: Dr. W. O. Binns, Forest Research Station, Alice Holt Lodge, Wrecclesham, Farnham, Surrey.

Secretary and Treasurer: Mrs. M. W. Dick, Institute of Foresters, 22 Walker Street, Edinburgh EH3 7HR.

Auditors: John M. Geoghegan & Co., 6 St. Colme Street, Edinburgh.

Councillors: *Retire in 1983*: G. J. Francis (*Fellow*); P. N. Edwards, R. T. Gray, R. D. L. Toleman, W. B. Walker (*Ordinary Members*); D. H. B. McLeod (*Voting Associate*); *Retire in 1982*: D. Brierton, E. H. M. Harris, D. A. Mithen (*Fellows*); A. J. Grayson, A. J. Low (*Ordinary Members*).

© *Oxford University Press, 1981*

Printed in Great Britain at the University Press, Oxford
by Eric Buckley, Printer to the University

CONTENTS

Number 1

The Effect of High Intensity Thinning on Yield. G. J. HAMILTON 1

The Influence of Five Early Respacing Treatments on the Growth of Sitka Spruce. D. J. KILPATRICK, J. M. SANDERSON and P. S. SAVILL 17

Top Height Growth Curves for Sitka Spruce in Northern Ireland. D. J. KILPATRICK and P. S. SAVILL 31

Sitka Spruce (*Picea sitchensis*) in North-East Scotland: I. Relationships Between Site Factors and Growth. J. F. BLYTH and D. A. MACLEOD 63

Distribution of *Crumenulopsis sororia* (Karst). M. CRAIG and A. J. HAYES 75

Forestry in South Wales 1960-80. J. W. L. ZEHETMAYR 89

REVIEWS

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE. Energy Aspects of the Forest Industries. C. P. MITCHELL 107

JOHN A. SINDEN and ALBERT C. WORRELL. Unpriced Values: Decisions without Market Prices. A. J. GRAYSON 108

STEPHEN H. SPURR and BURTON V. BARNES. Forestry Ecology 3rd Edition. D. C. MALCOLM 110

H. G. LLOYD. The Red Fox. I.R. TAYLOR 111

NOTICES 112

Number 2

Stability of Coniferous Tree Stems in Relation to Damage by Snow. J. A. PETTY and R. WORRELL 115

Efficiency of Tree Crowns and Stemwood Production at Different Canopy Leaf Densities. R. H. WARING, KEN NEWMAN and JOHN BELL 129

Dynamics of Coarse Root Production in a Young Plantation of *Picea sitchensis*. J. D. DEANS 139

Forest Fertilization: Some Guiding Concepts. HUGH G. MILLER 157

Some Effects of CO_2, Daylength and Nutrition on the Growth of Young Forest Tree Plants I. In the seedling Stage. A. E. CANHAM and W. J. McCAVISH 169

Some Aspects of the Growth of Beech Trees and the Incidence of Beech Bark Disease on Chalk Soils. D. LONSDALE and J. E. PRATT 183

Beech in Wessex – a Perspective on Present Health and Silviculture. J. R. ALDHOUS 197

The Correct Identy of Some Trees Attributed to *Eucalyptus coccifera* in United Kingdom. JULIAN EVANS and IAN BROOKER 211

REVIEWS

OLIVER RACKHAM. Ancient Woodland, its History, Vegetation and Uses in England. R. E. CROWTHER 213

R. H. WARING. Forests: Fresh Perspectives from Ecosystem Analysis. J. E. COUSENS 214

JAMES A. LARSEN. The Boreal Ecosystem. D. C. MALCOLM 216

KEITH OPENSHAW. Cost and Financial Accounting in Forestry: a Practical Manual. W. E. S. MUTCH 217

R. J. N. BUSBY and A. J. GRAYSON. Investment Appraisal in Forestry, with Particular Reference to Conifers in Britian. W. E. S. MUTCH 218

G. LESSARD and A. CHOUINARD. Bamboo Research in Asia. C. J. TAYLOR 219

BAYARD HORA. The Oxford Encyclopedia of Trees of the World. D. C. MALCOLM 221

NOTICES 221